Airplane Flight Manual Supplement for: Bombardier CL-600-2D15 Aircraft

## **FAA APPROVED**

# AIRPLANE FLIGHT MANUAL SUPPLEMENT

## **BOMBARDIER CL-600-2D15 AIRCRAFT**

SERIAL NUMBER			
REGISTRATION NUMBER			

This supplement must be attached to the Approved Airplane Flight Manual. The information contained herein supplements or supersedes the basic Flight Manual only in those areas listed, when the aircraft is modified by STC ST04008CH for the Aircell Broadband Services (ABS) System. For limitations, procedures and performance data not contained in this supplement, consult the basic Airplane Flight Manual.

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Revision A

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## **LOG OF REVISIONS**

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#### SECTION I - INTRODUCTION

#### A. EQUIPMENT

The Aircell Broadband Services (ABS) System consists of the following equipment:

- Two Cabin Wireless LAN Access Points using 802.11 a/b/g (CWAP)
- One ABS Air-to-Ground Communications Unit (AACU)
- One ABS Control Processor Unit (ACPU)
- Two Air-to-Ground Antennas installed on the bottom of the aircraft fuselage
- One PCS/Timing antenna installed on top of the aircraft fuselage
- One master INTERNET ON/OFF switch located in the cabin's forward left closet
- One Stand-Alone Video Content Loader (If installed on the aircraft)

The wireless LAN access points allow multiple users to access internet services using laptop computers or other personal computing devices using 802.11b/g or 802.11a wireless technology.

The ACPU receives data from the aircraft users via the wireless LAN access points and bundles the information for transmittal to a ground site. The AACU receives the information from the ACPU and transmits the air-to-ground component. Data received from the ground by the AACU is then returned to the ACPU where it is decoded and sent to the specific user via the wireless LAN access points.

Two air-to-ground (ATG) antennas are used to communicate with the ABS ground network. The ATG antennas are 6.5 inch high blade antenna with a T-top and located forward and aft on the underside centerline of the aircraft.

The PCS/Timing antenna is a dual element antenna. The PCS element is used on the ground to provide a data link using cellular technology. The timing element looks at the US GPS constellation and provides GPS position data to the AACU.

The Stand Alone Video Content Loader (SVCL) is used as a remote file server for the ACPU through the use of USB flash drives. The SVCL also provides an external 1000 Base-T Ethernet port allowing a portable device to access the ABS airborne network.

### **SECTION II – LIMITATIONS**

A. Use of the ABS Wireless Local Area Network (WLAN) System for functions other than providing internet connection and email services using portable electronic devices in the passenger cabin is prohibited.

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## SECTION III - OPERATING INSTRUCTIONS

#### A. EMERGENCY PROCEDURES

- 1. Aircell Broadband Services (ABS) System Smoke/Fumes/Fire
  - For CL-600-2D15 (CRJ 705) aircraft, refer to the aircraft's Quick Reference Handbook (QRH) Model CL 600-2D15 for "Smoke, Fire, Fumes" procedure.

#### **B. ABNORMAL PROCEDURES**

1. System Isolation

If the Flight Crew determines a need to shut down the ABS System, they should:

Select the INTERNET switch to OFF.

Instruct the Cabin Crew to deactivate the ABS system using the guarded **INTERNET** switch located on the inside wall of the left forward closet.

#### C. NORMAL PROCEDURES

1. Control

The following circuit breaker supplies power to the ABS System:

<u>Label</u>	<u>Function</u>	<u>Location</u>	Rating	Bus
INTERNET-AC	ABS System power	CBP 2 panel location E10	5 amp	115 VAC Service Bus

## 2. Operation

Consult relevant Airline Crew Operating Manual for normal system operation.

### **SECTION IV - PERFORMANCE**

No change

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